Abstract

In this paper, some higher order moments, spectral and bispectral density functions for some integer autoregressive of order one (INAR(1)) models are calculated. These models are the new skew INAR(1) (NSINAR(1)), the shifted geometric INAR(1) type-II (SGINAR(1)-II) and the dependent counting geometric INAR(1) (DCGINAR(1)). The spectrum, bispectrum and normalized bispectrum are estimated using the one and two dimensional lag windows as in Subba Rao and Gabr (1984). A realization is generated for each model of size n=500 for estimation. Also, the bispectral density function and normalized bispectral density function are used for studying the linearity of integer valued time series models.

References


**Index Terms**

Computer Science

Image Processing
Keywords

INAR(1); NSINAR(1); SGINAR(1)-II; DCGINAR(1); Moments; Cumulants; Spectrum; Bispectrum; Normalized bispectrum; Parzen lag window; 2-dimensional Subba Rao and Gabr lag window